

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/B2005/000407

International filing date (day/month/year)  
17.02.2005

Priority date (day/month/year)  
05.03.2004

International Patent Classification (IPC) or both national classification and IPC  
C07D251/68, D21H21/30

Applicant  
CLARIANT INTERNATIONAL LTD

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl  
Fax: +31 70 340 - 3016

Authorized Officer

Songy, O

Telephone No. +31 70 340-2345



**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IB2005/000407

---

**Box No. I Basis of the opinion**

---

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/B2005/000407

---

**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

---

1. Statement

Novelty (N)	Yes: Claims	3-5
	No: Claims	1 2 6-10
Inventive step (IS)	Yes: Claims	3-5
	No: Claims	1 2 6-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

**see separate sheet**

---

**Box No. VII Certain defects in the international application**

---

The following defects in the form or contents of the international application have been noted:

**see separate sheet**

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following documents (D1, D2) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: WO 98/42685 A (CIBA GEIGY AG ; ROHRINGER PETER (CH); REINEHR DIETER (DE); METZGER GEO) 1 October 1998 (1998-10-01)  
D2: WO 03/044275 A (CLARIANT INT LTD ; JACKSON ANDREW CLIVE (GB)) 30 May 2003 (2003-05-30)

**Novelty**

The present application does not meet the requirements of Article 33(1) PCT, because the subject-matter of claims 1,2, 6-10 is not new in the sense of Article 33(2) PCT.

The optical brightener of formula (1) is the same as the optical brightener disclosed in the example 9 of D1.

In said example 9 of D1, it is explained how to obtain an aqueous solution of compound of formula (1). The aqueous solution obtained during the process of example 1 is a priori stable. Therefore, the aqueous solution comprising an optical brightener of formula (1) claimed in claim 1 is not new.

The content of claim 2 is not new (M=Na and n=2).

The example 9 of D1 discloses exactly the same process for preparing the compound of formula (1) as the process claimed in claims 6 to 8.

The use of the aqueous solution of claim 1 for brightening of paper, eg in a pigmented coating composition, is described in D1 (pages 5-8, claims 12-24).

In the same way, the example 1 and the pages 17-19 of D2 disclose the aqueous solution

of claim 1-2, the process for preparing the aqueous solution of claim 6 and the use of said aqueous solution for brightening of paper of claims 9-10.

**Inventive step**

Since the subject-matter of claims 1,2, 6-10 is not new, it is also not inventive in the sense of Article 33(3) PCT.

**Industrial applicability :**

The subject-matter of claims 1-10 is considered to meet the requirements of Article 33(4) PCT.

**Re Item VII**

**Certain defects in the international application**

The document D1 has not been identified in the description and the relevant background art disclosed therein has not been briefly summarised in an objective way. Hence, the requirements of Rule 5.1(a)(ii) PCT are not fulfilled.